

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-36. Canceled.

37. (new) A method for selecting access network for a mobile multi-access terminal in an Internet Protocol (IP)-based communication system that includes a network side of a radio interface and a mobile terminal side of the radio interface, comprising the steps of:

a network-based access selection unit, arranged at the network side, requesting database information from a network-based profile server associated with a plurality of databases for retrieving database information including access network properties, operator policies, operator/user prioritization criteria, and allowed user subscription profiles;

said network-based access selection unit receiving the retrieved database information from the profile server;

said network-based access selection unit receiving terminal-specific information including available/current access networks from an access agent in the mobile terminal;

said network-based access selection unit selecting a current best access network for the mobile terminal (1) based on the retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available/current access networks; and

said network-based access selection unit communicating an access network recommendation including an indication of the selected current best access network to the access

agent in the mobile terminal to enable a final decision, by an access manager in said mobile terminal, on which access network to use based on said access network recommendation.

38. (new) The method of claim 37, wherein the selecting step involves executing an access selection algorithm based on predefined prioritization criteria.

39. (new) The method of claim 37, further comprising the steps of
collecting, at the profile server, the database information from at least a subset of its associated databases; and

adapting, at the profile server, at least some of the database information such that it can be read by the access selection unit.

40. (new) The method of claim 37, wherein the database information comprises information related to an item selected from the group of: access network, user device, end user and operator.

41. (new) The method of claim 37, wherein the terminal-specific information comprises information related to an item selected from the group of: available access networks, currently used applications, location, speed, direction and route.

42. (new) The method of claim 37, wherein the mobile terminal resides in a vehicle and the terminal-specific information from the access agent comprises measurements from a

device selected from the group of: a Global Positioning System (GPS) device, a route sensor and a velocity sensor.

43. (new) The method of claim 37, further comprising the steps of
predicting, at the access selection unit, a future best access network for the mobile terminal based on the database information from the profile server; and
communicating the future best access network prediction from the access selection unit to the access agent.

44. (new) The method of claim 37, wherein the terminal-specific information comprises an indication of a current terminal route, further comprising the steps of
determining, at the access selection unit, which access networks that will be possible access candidates after a predetermined period of time; and
suggesting, from the access selection unit, if there is no access candidate for at least a portion of the current terminal route, an alternative terminal route to the access agent.

45. (new) The method of claim 37, wherein the access selection unit and the profile server are parts of an overall service network for services related to mobility, security and access handling.

46. (new) The method of claim 45, wherein the service network further comprises a security server unit to which the profile server transfers database information for authentication, authorization and accounting purposes.

47. (new) The method of claim 45, further comprising the steps of
sending a triggering message from the access selection unit to a security server unit in the
service network when the mobile terminal is about to change from a first to a second access
network; and

transferring, via the security server unit, security information between security domains
associated with the first and second access networks in response to the triggering message.

48. (new) The method of claim 37, further comprising the steps of
sending terminal-related database information from the profile server to an application
server in the service network; and

adapting, at the application server, an application for the mobile terminal based on the
terminal-related database information.

49. (new) A network-based server device in an IP-based communication system
includes a network side of a radio interface and a mobile terminal side of the radio interface,
comprising

means for requesting database information from a network-based profile server associated
with a plurality of databases for retrieving database information including access network
properties, operator policies, operator/user prioritization criteria, and allowed user subscription
profiles;

means for receiving the retrieved database information from the profile server;

means for receiving terminal-specific information, including available access networks, from an access agent in the mobile terminal

means for selecting a current best access network for the mobile terminal (1) based on the retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available access networks; and

means for communicating an access network recommendation including an indication of the selected current best access network to the access agent in the mobile terminal to enable a final decision, by an access manager in said mobile terminal, on which access network to use based on said access network recommendation.

50. (new) The device of claim 49, wherein the means for selecting comprises means for executing an access selection algorithm based on predefined prioritization criteria.

51. (new) The device of claim 49, further comprising
means for predicting a future best access network for the mobile terminal based on the database information from the profile server; and
means for communicating the future best access network prediction to the mobile terminal.

52. (new) The device of claim 49, further comprising
means for determining which access networks that will be possible access candidates after a predetermined period of time; and

means for suggesting, if there is no access candidate for at least a portion of the current terminal route, an alternative terminal route to the mobile terminal.

53. (new) The device of claim 49, belonging to an overall service network for services related to mobility, security and access handling.

54. (new) The device of claim 53, further comprising means for sending a triggering message to a security server unit in the service network when the mobile terminal is about to change from a first to a second access network, whereby security information is transferred between security domains associated with the first and second access networks via the security server unit in response to the triggering message.

55. (new) An IP-based communication system having a network side of a radio interface and a mobile terminal side of the radio interface with for providing communications with a mobile multi-access terminal via one of multiple access networks, comprising:

network-based access selection means, arranged in a network-based access selection unit on the network side, for requesting database information from a network-based profile server associated with a plurality of databases for retrieving database information including access network properties, operator policies, operator/user prioritization criteria and allowed user subscription profiles;

means, arranged in the network-based access selection means, for receiving the retrieved database information from the profile server;

means, arranged in the network-based access selection means, for receiving terminal specific information, including available access networks, from an access agent in the mobile terminal;

means, arranged in the access selection means, for selecting a current best access network for the mobile terminal (1) based on the retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available access networks; and

means for communicating an access network recommendation including an indication of the selected current best access network from the network-based access selection means to the access agent in the mobile terminal to enable a final decision, by an access manager in said mobile terminal, on which access network to use based on said access network recommendation.

56. (new) The system of claim 55, wherein the profile server provides a unified interface towards its associated databases.

57. (new) The system of claim 55, wherein the network-based access selection means and the profile server are parts of an overall service network for services related to mobility, security and access handling.

58. (new) The system of claim 55, wherein the service network further comprises a security server unit with means for communicating with the profile server for authentication, authorization and accounting purposes.

59. (new) The system of claim 55, further comprising
means for sending terminal-related database information from the profile server to an
application server in the service network; and
means for adapting, at the application server, an application for the mobile terminal based
on the terminal-related database information.

60. (new) A mobile terminal associated with at least two access possibilities in an IP-
based communication system that has means for selecting an access network for the mobile
terminal, comprising:

link managers, a link manager for each access network interface of the terminal, said link
managers also operable for detecting available/current access networks;

means for transmitting terminal-specific information including available/current access
networks from an access agent in the mobile terminal to a network-based unit for access selection
in the network;

means for receiving, at the access agent, an access network recommendation comprising an
indication of the current best access network from the network-based access selection unit selected
(1) based on retrieved database information including one or more access network properties, one
or more operator policies, one or more operator/user prioritization criteria, and one or more
allowed user subscription profiles and (2) also based on the terminal-specific information
including available access networks;

means for forwarding the access network recommendation from the access agent to an
access manager in the mobile terminal;

means for determining, at the access manager, which access network to use based on the access network recommendation and input user preferences and/or priority information in the mobile terminal; and

means for providing corresponding instructions from said access manager to the link manager(s), by means of which the terminal can be connected/disconnected to the respective access network.

61. (new) A network-based server device in an IP-based communication system includes a network side of a radio interface and a mobile terminal side of the radio interface, comprising electronic circuitry configured to:

request database information from a network-based profile server associated with a plurality of databases for retrieving database information including access network properties, operator policies, operator/user prioritization criteria, and allowed user subscription profiles;

receive the retrieved database information from the profile server;

receive terminal-specific information, including available access networks, from an access agent in the mobile terminal

select a current best access network for the mobile terminal (1) based on the retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available access networks; and

generate an access network recommendation including an indication of the selected current best access network to the access agent in the mobile terminal to enable a final decision, by an

access manager in said mobile terminal, on which access network to use based on said access network recommendation.

62. (new) An IP-based communication system having a network side of a radio interface and a mobile terminal side of the radio interface with for providing communications with a mobile multi-access terminal via one of multiple access networks, comprising:

a network-based access selector on the network side configured to request database information from a network-based profile server associated with a plurality of databases for retrieving database information including access network properties, operator policies, operator/user prioritization criteria and allowed user subscription profiles;

receiving circuitry arranged on the network side for receiving the retrieved database information from the profile server and for receiving terminal specific information, including available access networks, from an access agent in the mobile terminal;

selection circuitry, arranged on the network side, configured to select a current best access network for the mobile terminal (1) based on the retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available access networks; and

signal generation circuitry configured to communicate an access network recommendation signal including an indication of the selected current best access network from the network-based access selector to the access agent in the mobile terminal to enable a final decision, by an access manager in said mobile terminal, on which access network to use based on said access network recommendation.

63. (new) A mobile terminal, associated with at least two access possibilities in an IP-based communication system, for selecting an access network for the mobile terminal, comprising:

multiple link managers, wherein each access network interface of the terminal has an associated link manager, said link managers also being configured to detect available/current access networks;

a transmitter for transmitting terminal-specific information including available/current access networks from an access agent in the mobile terminal to a network-based unit for access selection in the network;

a receiver for receiving, at the access agent, an access network recommendation including an indication of the current best access network from the network-based access selection unit selected (1) based on retrieved database information including one or more access network properties, one or more operator policies, one or more operator/user prioritization criteria, and one or more allowed user subscription profiles and (2) also based on the terminal-specific information including available access networks; and

data processing circuitry configured to:

forward the access network recommendation from the access agent to an access manager in the mobile terminal;

determine, at the access manager, which access network to use based on the access network recommendation and input user preferences and/or priority information in the mobile terminal; and

provide corresponding instructions from said access manager to the link manager(s)
to permit the terminal to be connected to the respective access network.